



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY  
AFFAIRS (PERA)  
BOARD AND CODE ADMINISTRATION DIVISION

## NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599  
[www.miamidade.gov/pera/](http://www.miamidade.gov/pera/)

WinDoor, Inc.  
7500 Amsterdam Drive  
Orlando, FL 32832

### SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

### DESCRIPTION: Series "1000 180°" Clipped, Extruded Aluminum Mullion – L.M.I.

**APPROVAL DOCUMENT:** Drawing No. **08-00663**, titled "1000 Series 180° LMI Vertical Mullion – 4'0 x 10'0 and 5'0 x 8'0 Maximum Windows", sheets 1 through 5 of 5, dated 12/18/08, with revision A dated 06/05/09, prepared by manufacturer, signed and sealed by Luis R. Lomas, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA revises NOA # **08-0902.04** and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**



*MP*  
7/31/28/12

NOA No. 12-0130.30  
Expiration Date: December 23, 2014  
Approval Date: April 05, 2012  
Page 1

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.
2. Drawing No **08-00663**, Sheets 1 through 5 of 5, titled "1000 Series 180° LMI Vertical Mullion – 4'0 x 10'0 and 5'0 x 8'0 Maximum Windows", dated 12/18/08, with revision A dated 06/05/09, prepared by manufacturer, signed and sealed by Luis R. Lomas, P.E.

**B. TESTS**

1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
2) Large Missile Impact Test per FBC, TAS 201-94  
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of: series 1000 fixed windows w/180°aluminum impact mullion, series 2000 fixed windows w/180° mullion, series 1000/2000 fixed windows w/135°fixed mullion and series 1000/2000 fixed windows w/135°adjustable mullion, all prepared by National Certified Testing Laboratories, Test Report No. **NCTL-210-3632-1**, dated 08/26/09, signed and sealed by Gerard J. Ferrara, P.E. *(Submitted under previous NOA#08-0902.04)*

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with FBC-2007, dated 6/9/08, 05/04/09 and 10/11/09, prepared, signed and sealed by Luis R. Lomas, P.E. *(Submitted under previous NOA#08-0902.04)*
2. Glazing complies with ASTM E1300-04

**D. QUALITY ASSURANCE**

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

**E. MATERIAL CERTIFICATIONS**

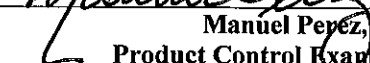
1. None.

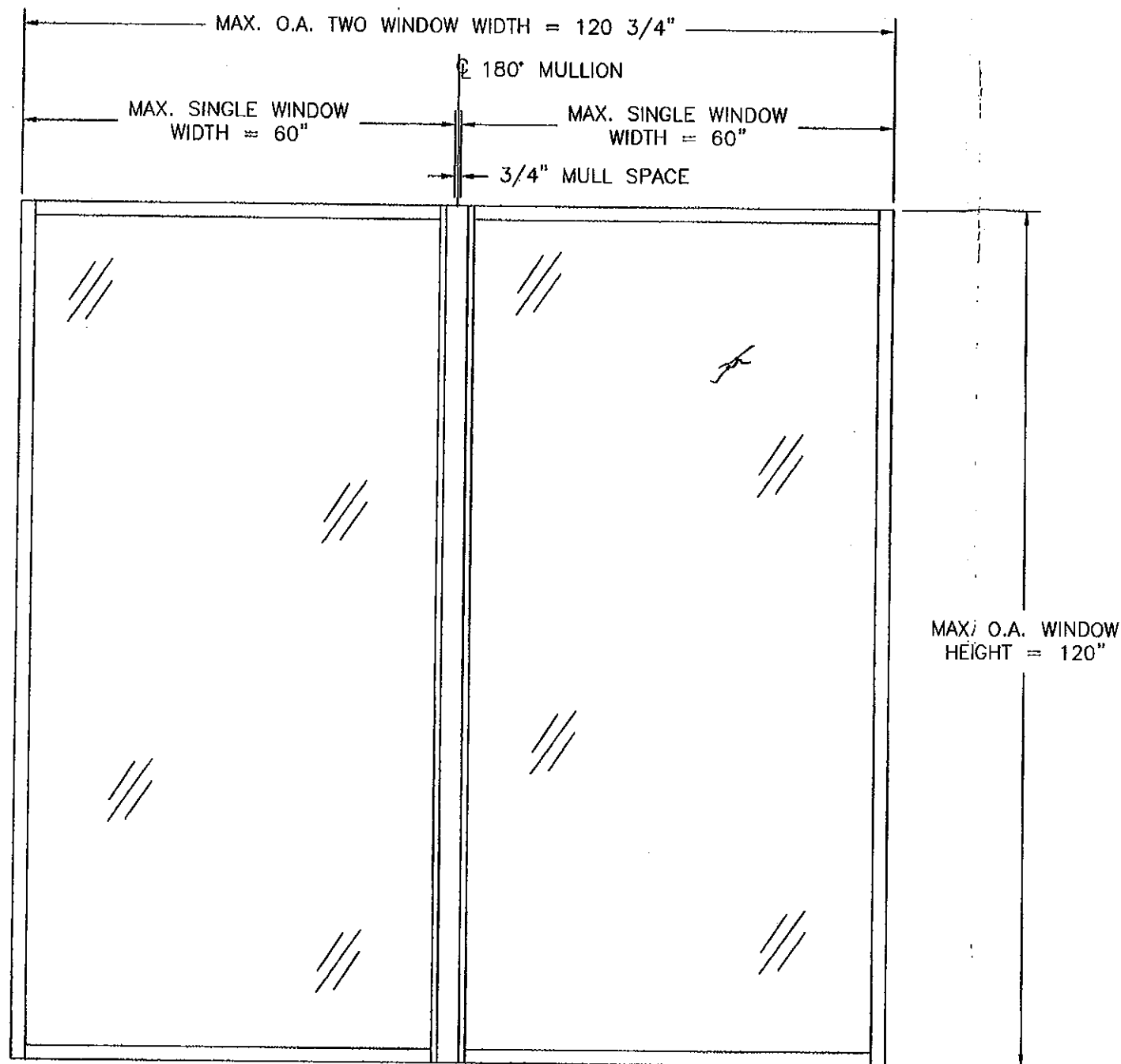
**F. STATEMENTS**

1. Statement letter of conformance, complying with FBC-2010, and of no financial interest, dated January 19, 2012, signed and sealed by Luis R. Lomas, P.E.
2. Laboratory compliance letter for Test Report No. **NCTL-210-3632-1**, issued by National Certified Testing Laboratories, dated 08/26/09, signed and sealed by Gerard J. Ferrara, P.E. *(Submitted under previous NOA#08-0902.04)*

**G. OTHER**

1. Notice of Acceptance No. **08-0902.04**, issued to WinDoor, Inc. for their Series "1000" 180° Clipped, Extruded Aluminum Mullion – L.M.I., approved on 12/23/09 and expiring on 12/23/14.

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 12-0130.30  
Expiration Date: December 23, 2014  
Approval Date: April 05, 2012



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	UPDATED PER TESTING	08/05/09	R.L.

#### NOTES:

- 1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE CURRENT FLORIDA BUILDING CODE INCLUDING THE HVHZ.
- 2) WOOD FRAMING/2X BUCK, 16GA. STEEL STUD OR MASONRY/CONCRETE OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. WOOD FRAMING/2X BUCK, 16GA. STEEL STUD OR MASONRY/CONCRETE OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 3) ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR  $C_d=1.6$  WAS USED FOR WOOD ANCHOR CALCULATIONS.
- 4) MULLION MATERIAL: EXTRUDED ALUMINUM 6063-T6
- 5) APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN AREAS WHERE WIND BORNE DEBRIS PROTECTION IS REQUIRED.
- 6) DESIGN PRESSURE AND INSTALLATION DETAILS SHOWN IN THIS DOCUMENT APPLY ONLY TO THE MULLION. WINDOWS MUST BE APPROVED UNDER SEPARATE APPROVAL.
- 7) MASONRY INSTALLATION: SEE SHEET 3.
- 8) 2X BUCK/WOOD FRAMING INSTALLATION: SEE SHEET 4.
- 9) 16GA. STEEL STUD FRAMING INSTALLATION: SEE SHEET 5.
- 10) SINGLE UNITS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. SINGLE UNITS TO BE MULLED TOGETHER MUST BE MANUFACTURED BY WinDoor INC. AND MUST BE MADE OUT OF EXTRUDED ALUMINUM 6063-T6.
- 11) DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW UNIT.
- 12) TWIN CONFIGURATION SHOWN. UNITS MAY BE MULLED TOGETHER INDEFINITELY AS LONG AS THE SINGLE UNIT WIDTH AND THE SINGLE UNIT HEIGHT ARE NOT EXCEEDED AND MULLION IS ANCHORED AS SHOWN HEREIN.
- 13) MULLION VERTICAL INSTALLATION IS SHOWN, MULLION MAY BE USED IN HORIZONTAL APPLICATIONS AS LONG AS DIMENSIONS INDICATED HEREIN ARE NOT EXCEEDED AND MULLION IS ANCHORED ACCORDING TO THIS DOCUMENT.
- 14) INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW:
  - A. WOOD - MINIMUM SPECIFIC GRAVITY OF  $G=0.42$
  - B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3,350 PSI.
  - C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
  - D. METAL STUD - 16GA. .060" MINIMUM THICKNESS.

#### 1000 SERIES LARGE MISSILE IMPACT 180° MULLION

TYPICAL ELEVATION EXTERIOR VIEW. DOUBLE SHOWN,  
MULTIPLES ARE APPROVED, SEE NOTE 12 SHEET 1

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	ELEVATION AND GENERAL NOTES
2	BILL OF MATERIALS, COMPONENTS AND CROSS SECTION
3 - 5	INSTALLATION DETAILS AND DESIGN PRESSURE CHART

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 12-0130.30  
Expiration Date DEC. 23, 2014

By *Manuel Perez*  
Miami Code Product Control

Approved as complying with the  
Florida Building Code  
Date DEC. 23, 2009  
NCA# 08-0902.02  
Miami Code Product Control  
Division

**WinDoor**  
INCORPORATED

7500 AMSTERDAM DRIVE  
ORLANDO, FL 32832  
Phone: 407.481.8400  
Fax: 407.481.0505  
www.windoorinc.com

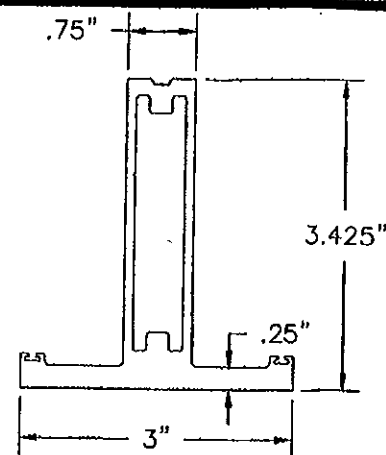
1000 SERIES 180° LMI VERTICAL MULLION  
4'0 x 10'0 AND 5'0 x 8'0 MAXIMUM WINDOWS  
ELEVATION AND GENERAL NOTES

DRAWN: TJH	DWG NO. 08-00663	REV A
SCALE NTS	DATE 12/18/08	SHEET 1 OF 5

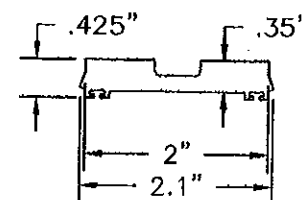
*Luis R. Lomas*  
11/18/09  
LUI R. LOMAS P.E.  
Florida No. 62514

PARTS LIST				
NO.	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	FH-02488	1000 SERIES 180° MULLION	KEYMARK	ALUMINUM 6063-T6
2	FH-03038	1000 SERIES 180° MULLION CAP	KEYMARK	ALUMINUM 6063-T6
3	FH-03040	1000 SERIES 180° MULLION COVER	KEYMARK	ALUMINUM 6063-T6
4		MULLION GLAZING VINYL		
5	FS-03854	4" x 8" x 1/8" 4HOLE T-CLIP	KEYMARK	ALUMINUM 6063-T6
6		1/4" ELCO CRETE-FLEX	ELCO	STAINLESS STEEL
7		#14 CUT THREAD WOOD SCREW		STAINLESS STEEL
8		1/4"-14 3-POINT TEK SCREW	ITW	STAINLESS STEEL
9		#12 TEK SCREW		STAINLESS STEEL
10		#10 x 3/4" SELF TAPPING SCREW		STAINLESS STEEL
11	FH-02485	HEAD, SILL & JAMB FRAME	KEYMARK	ALUMINUM 6063-T6
12	FS-02862	FLUSH FRAME PLATE	KEYMARK	ALUMINUM 6063-T6
13	FS-01882	INSERT	KEYMARK	ALUMINUM 6063-T6
14	FS-02479	SINGLE GLAZED GLASS STOP	KEYMARK	ALUMINUM 6063-T6

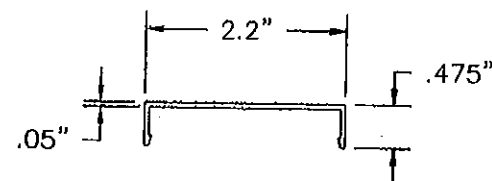
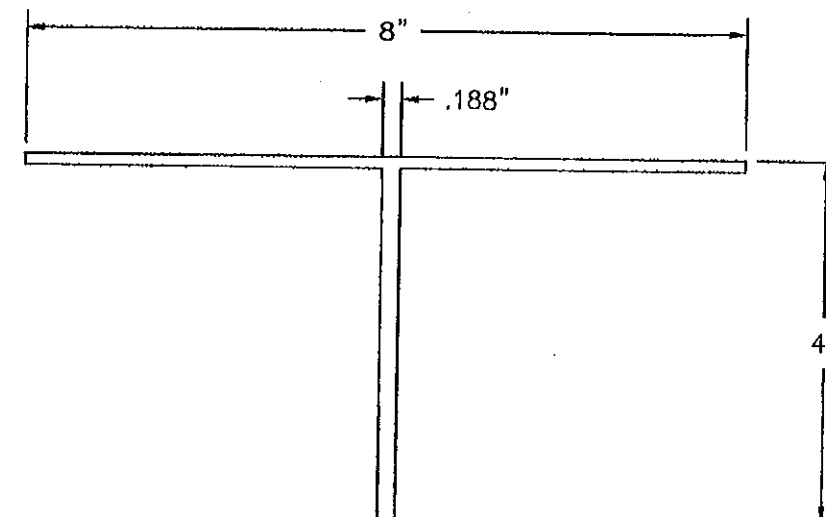
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	UPDATED PER TESTING	06/05/09	R.L.



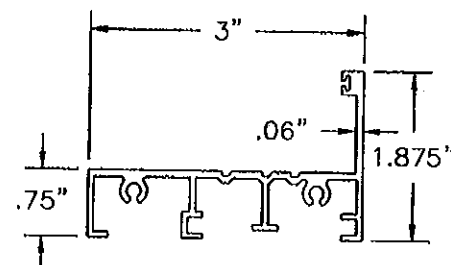
① 1000 SERIES 180° WINDOW MULLION  
6063-T6 ALUM.



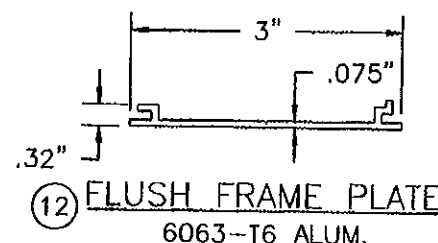
② 1000 SERIES 180° MULLION CAP  
6063-T6 ALUM.



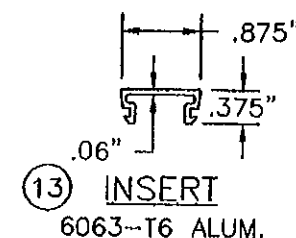
③ 1000 SERIES 180° MULLION COVER  
6063-T6 ALUM.



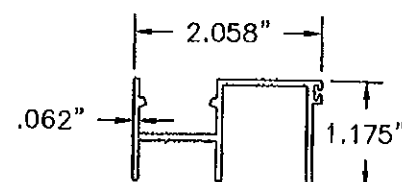
⑪ HEAD, SILL & JAMB FRAME  
6063-T6 ALUM.



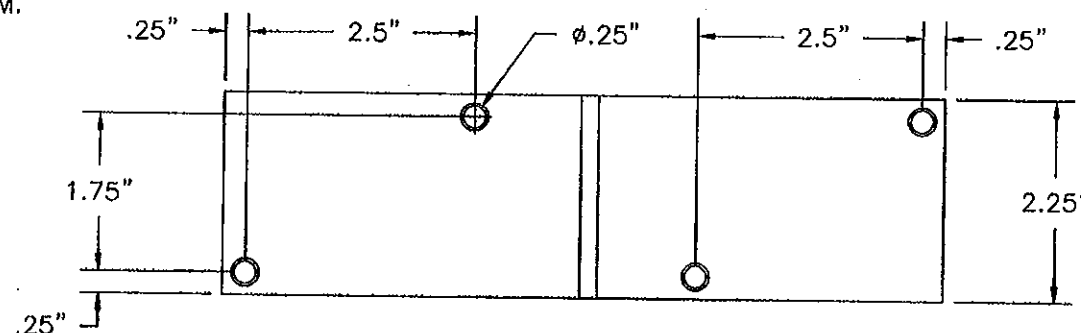
⑫ FLUSH FRAME PLATE  
6063-T6 ALUM.



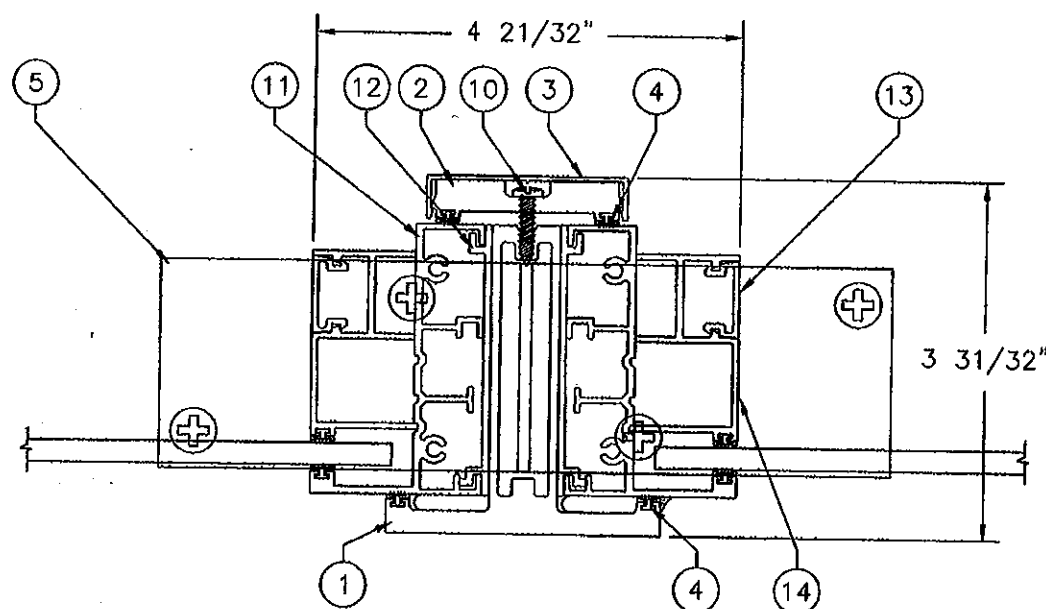
⑬ INSERT  
6063-T6 ALUM.



⑭ SINGLE GLAZED GLASS STOP  
6063-T6 ALUM.



⑤ 4" x 8" x 1/8" 4HOLE T-CLIP  
6063-T6 ALUMINUM .125" THICK



MULLION CROSS SECTION  
TOTAL MI VALUE = 8.9641

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 12-0130-3D  
Expiration Date DEC. 23, 2014  
By *Manuel Pera*  
Miami Dade Product Control

Approved as complying with the  
Florida Building Code  
Date DEC. 23, 2009  
By *Manuel Pera*  
Miami Dade Product Control

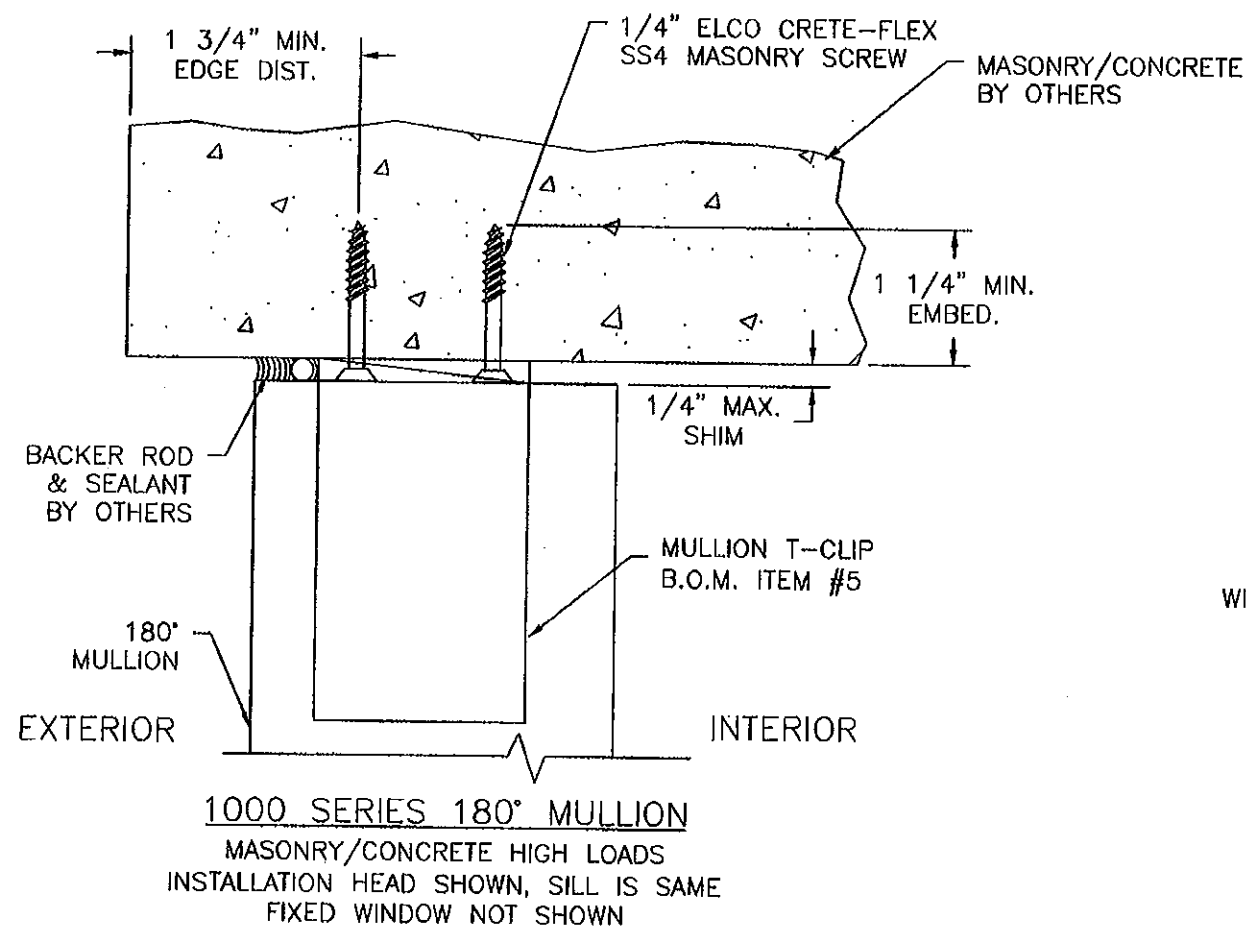
**WinDoor**  
INCORPORATED

7500 AMSTERDAM DRIVE  
ORLANDO, FL 32832  
Phone: 407.481.8400  
Fax: 407.481.0303  
www.windoorinc.com

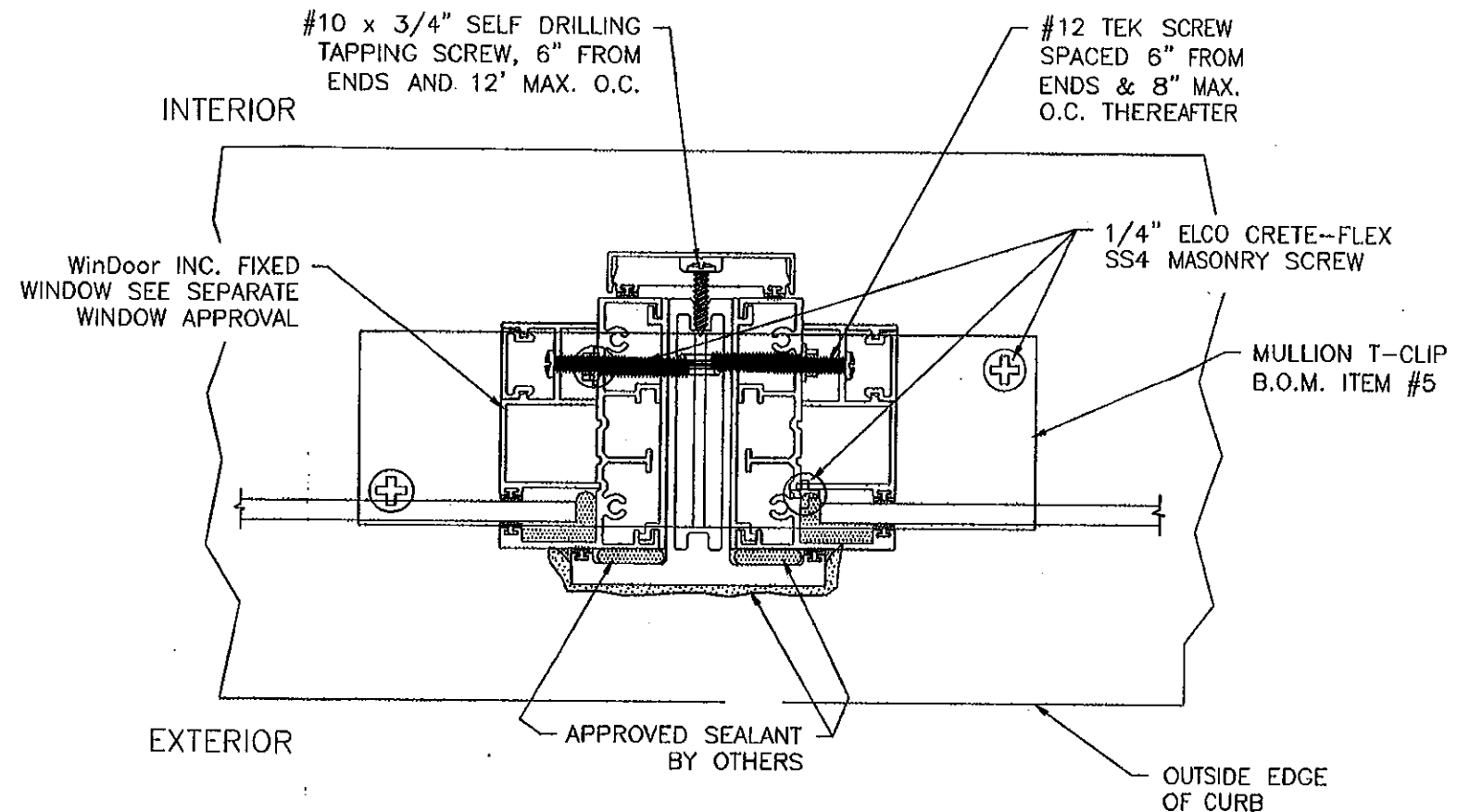
1000 SERIES 180° LMI VERTICAL MULLION  
4'0 x 10'0 AND 5'0 x 8'0 MAXIMUM WINDOWS  
BILL OF MATERIALS, COPONENTS & CROSS SECTION

DRAWN: TJH DWG NO. 08-00663 REV A  
SCALE NTS DATE 12/18/08 SHEET 2 OF 5

*Manuel Pera*  
11/18/09  
LUIS R. LOMAS P.E.  
Florida No. 62514



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	UPDATED PER TESTING	06/05/09	R.L.



**Maximum design pressure capacity chart (psf)**  
**1000 Series FW 180° Mull Masonry Installation**

Height (In)	Single Window Width (in)						
	24.0	30.0	36.0	42.0	48.0	54.0	60.0
60.0	200	200	200	200	200	200	200
66.0	200	200	200	200	188	180	176
72.0	200	200	195	177	165	156	150
78.0	200	200	176	158	146	138	132
84.0	200	183	160	143	132	123	117
90.0	200	168	146	131	120	111	105
96.0	188	156	135	120	110	102	96
102.0	176	145	125	111	100	91	-
108.0	157	127	107	93	83	-	-
114.0	133	107	91	79	70	-	-
120.0	114	92	77	67	59	-	-

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 12-0130.30  
Expiration Date DEC. 23, 2014  
By Manuel Perez  
Miami Dade Product Control

Approved as complying with the  
Florida Building Code  
Date DEC. 23, 2009  
By Manuel Perez  
Miami Dade Product Control

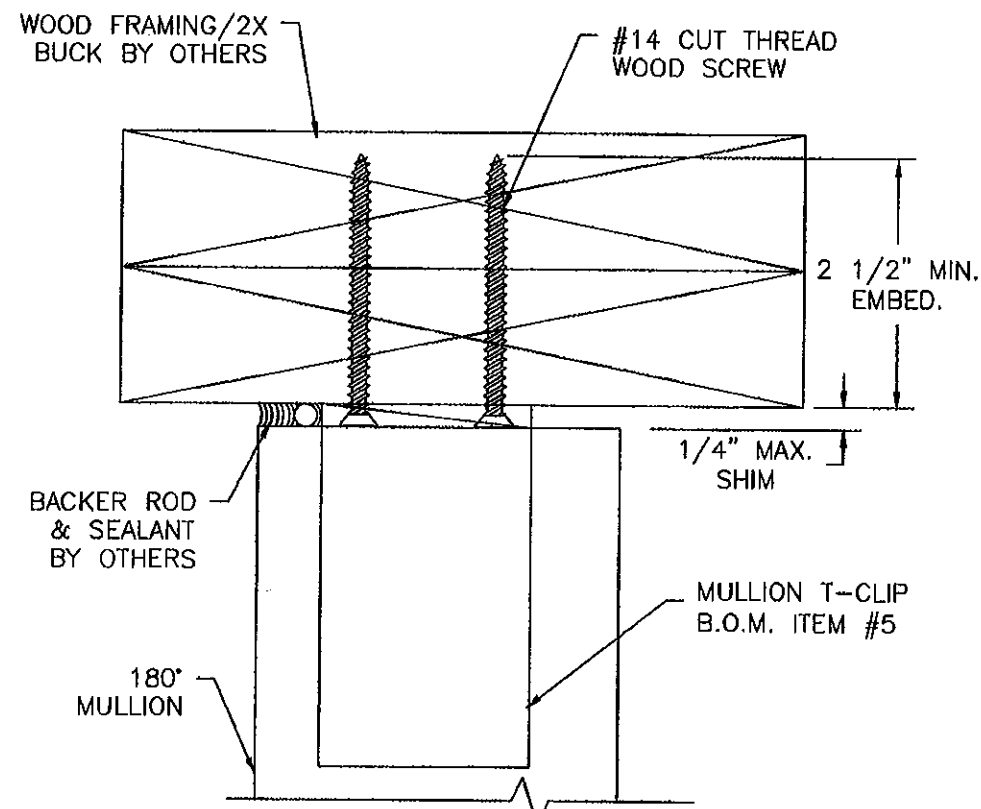
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**1000 SERIES 180° LMI VERTICAL MULLION**  
**4'0 x 10'0 AND 5'0 x 8'0 MAXIMUM WINDOWS**  
**INSTALLATION DETAILS AND DESIGN PRESSURE CHART**

DRAWN: TJH DWG NO. 08-00663 REV A  
SCALE NTS DATE 12/18/08 SHEET 3 OF 5

Manuel Perez  
11/18/09  
LUIS R. LOMAS P.E.  
Florida No. 62514

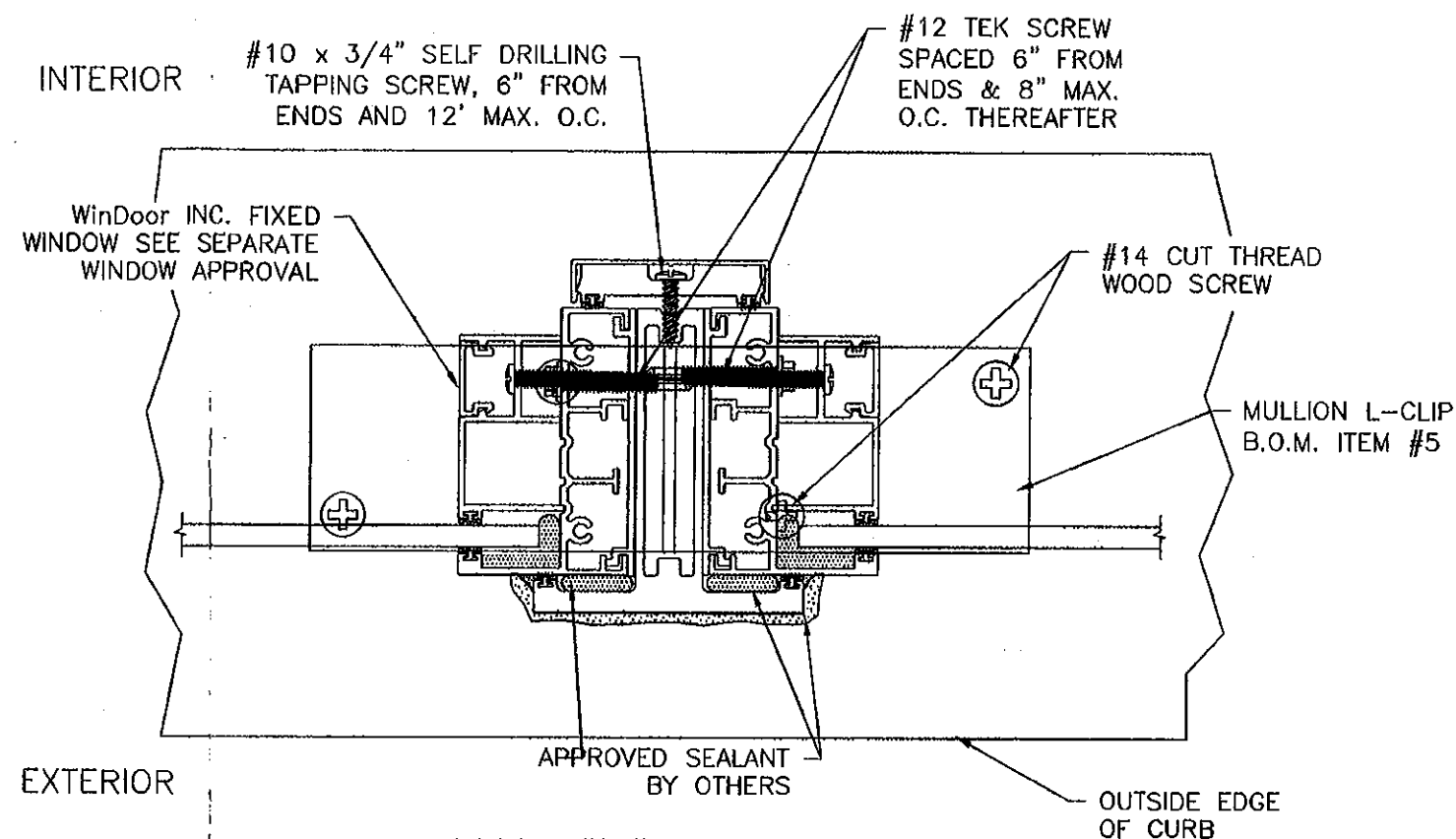


EXTERIOR 1000 SERIES 180° MULLION INTERIOR

WOOD FRAMING/2X BUCK HIGH LOADS  
INSTALLATION HEAD SHOWN, SILL IS SAME  
FIXED WINDOW NOT SHOWN

**Maximum design pressure capacity chart (psf)**  
**1000 Series FW 180° Mull Wood Framing Installation**

Height (in)	Single Window Width (in)						
	24.0	30.0	36.0	42.0	48.0	54.0	60.0
60.0	200	200	199	184	174	169	167
66.0	200	197	174	159	149	143	139
72.0	200	176	155	140	131	124	119
78.0	190	159	139	126	116	109	104
84.0	174	145	127	114	104	98	93
90.0	161	134	116	104	95	88	83
96.0	149	124	107	95	87	81	76
102.0	139	115	99	88	80	74	-
108.0	131	108	93	82	74	-	-
114.0	123	101	87	77	69	-	-
120.0	114	92	77	67	59	-	-



1000 SERIES 180° MULLION

WOOD FRAMING/2X BUCK HIGH LOADS  
INSTALLATION SILL SHOWN, HEAD IS SAME

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 12-0130.30  
Expiration Date DEC 23, 2014  
By *Maurice Perez*  
Miami Dade Product Control

Approved as complying with the  
Florida Building Code  
Date DEC 23, 2009  
NOA# 08-0902.04  
Miami Dade Product Control  
Division  
By *Maurice Perez*

**WinDoor**  
**INCORPORATED**

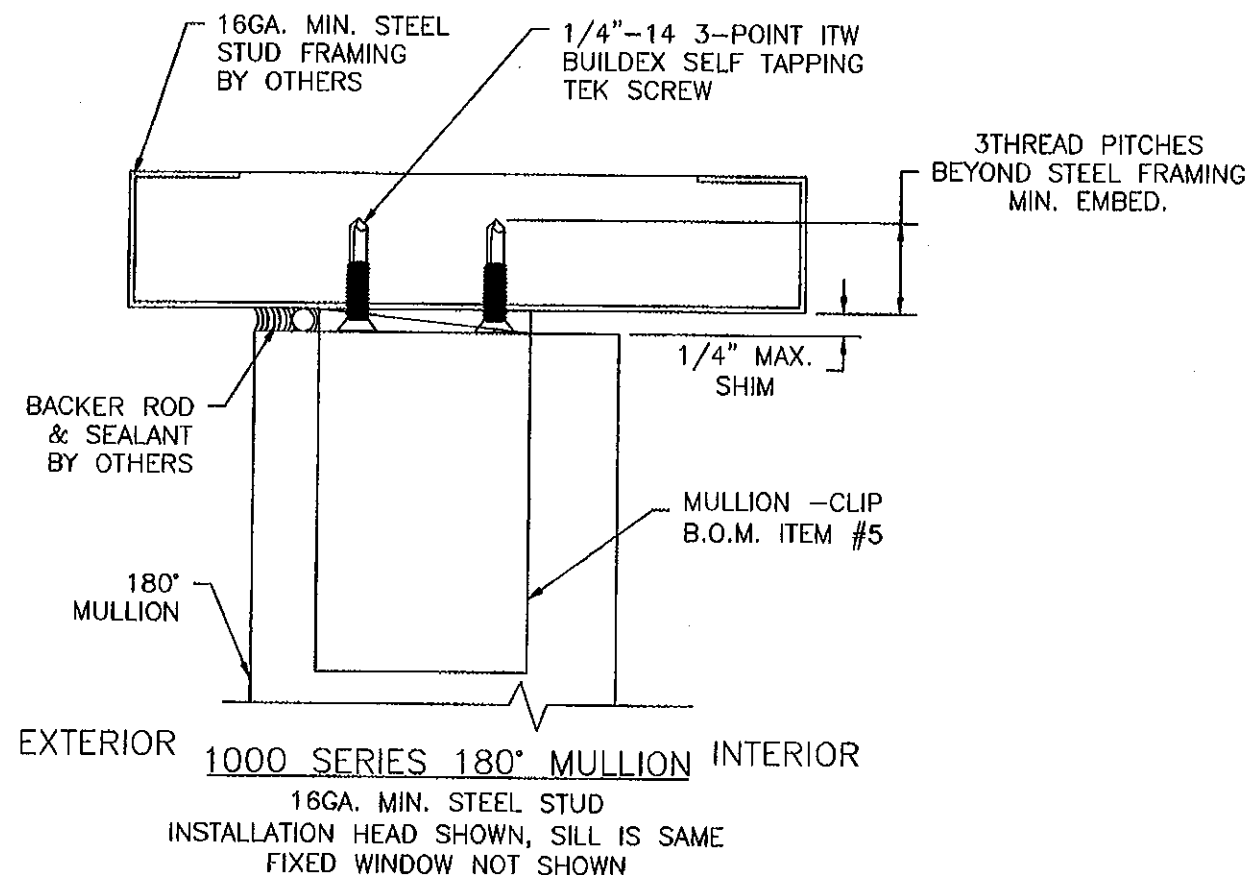
7500 AMSTERDAM DRIVE  
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1000 SERIES 180° LMI VERTICAL MULLION  
4'0 x 10'0 AND 5'0 x 8'0 MAXIMUM WINDOWS  
INSTALLATION DETAILS AND DESIGN PRESSURE CHART

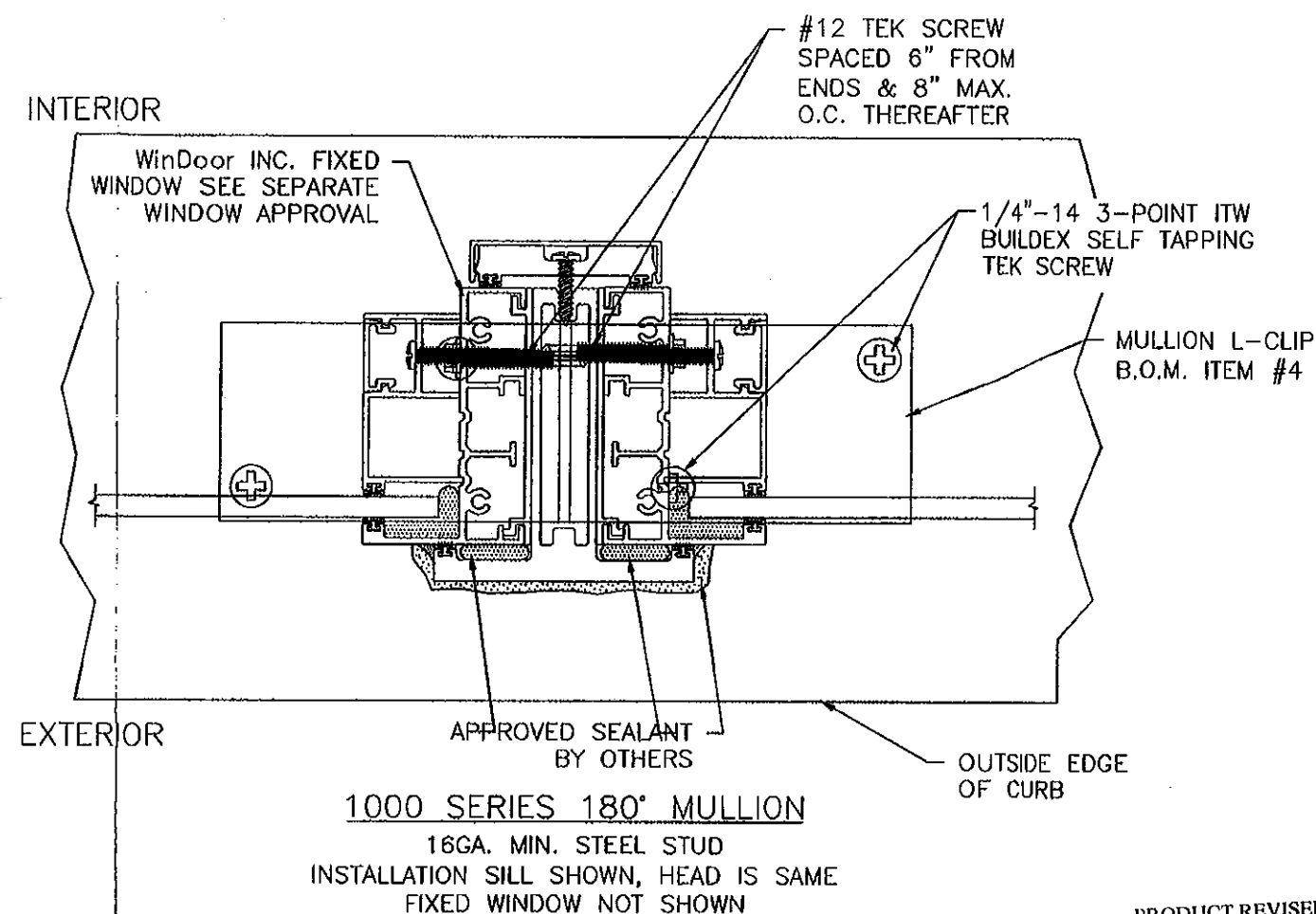
DRAWN: TJH DWG NO. 08-00663 REV A

SCALE NTS DATE 12/18/08 SHEET 4 OF 5

*Luis R. Lomas*  
11/18/09  
LUI'S R. LOMAS P.E.  
Florida No: 62514



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	UPDATED PER TESTING	06/05/09	R.L.



**Maximum design pressure capacity chart (psf)**  
**1000 Series FW 180° Mull Steel Framing Installation**

Height (In)	Single Window Width (In)						
	24.0	30.0	36.0	42.0	48.0	54.0	60.0
60.0	200	200	200	200	200	200	200
66.0	200	200	200	200	200	200	200
72.0	200	200	200	200	200	200	200
78.0	200	200	200	200	200	200	200
84.0	200	200	200	200	187	173	162
90.0	200	200	189	166	149	137	128
96.0	200	182	154	135	121	111	103
102.0	187	151	128	112	100	91	-
108.0	157	127	107	93	83	-	-
114.0	133	107	91	79	70	-	-
120.0	114	92	77	67	59	-	-

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 12-0130.30  
Expiration Date DEC 23, 2014  
By *Marcus Perez*  
Miami Dade Product Control

Approved as complying with the  
Florida Building Code  
Date DEC 23, 2009  
Noted 05-0902-04  
Miami Dade Product Control  
By *Marcus Perez*

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1000 SERIES 180° LMI VERTICAL MULLION  
4'0 x 10'0 AND 5'0 x 8'0 MAXIMUM WINDOWS  
INSTALLATION DETAILS AND DESIGN PRESSURE CHART

DRAWN: TJH DWG NO. 08-00663 REV A  
SCALE NTS DATE 12/18/08 SHEET 5 OF 5

*Luis R. Lomas*  
11/18/09  
LUISS R. LOMAS/P.E.  
Florida No 62514